

SOLID ACID CATALYZED REACTIVE STRIPPING OF IMPURITIES
FORMED DURING THE PRODUCTION OF 1,3-PROPANEDIOL

5

Abstract of the Disclosure

A process for producing 1,3-propanediol comprising the steps of: a) forming an aqueous solution of 3-hydroxypropanal, b) hydrogenating the
10 3-hydroxypropanal to form a first crude 1,3-propanediol mixture comprising 1,3-propanediol, water, and MW 132 cyclic acetal, c) distilling the first crude 1,3-propanediol mixture to remove water and low boiling impurities and form a second crude 1,3-propanediol
15 mixture, d) contacting the second crude 1,3-propanediol mixture with a solid acid purifier at a temperature of from about 50 to about 250°C to convert the MW 132 cyclic acetal to more volatile cyclic acetals, and e) separating the more volatile cyclic acetals from the 1,3-propanediol
20 by distillation or gas stripping.